

S/N 09/040,539

a main screen image window for moving said display indicating frame and said display area within said main screen in correspondence to an output representing movement of a pointing device as notified by said first sub-screen window, said first sub-screen window causing said display indicating frame to be moved within said first sub-screen while said pointing device is in dragging state;

a second sub-screen image window for displaying said display indicating frame in said second sub-screen when said pointing device has moved said display indicating frame by dragging it into said second sub-screen; and

[A window display device according to claim 1,] wherein said display indicating frame has a width and a height, said width being less than a width of said first sub-screen and said height being less than a height of said first sub-screen such that the sub-screen displays a reduced image of a page which is currently displayed on said main screen with the area displayed in said main screen indicated by a display indicating frame.

TELEPHONE INTERVIEW

Applicant wishes to express his appreciation to the Examiner for his time in the June 22, 2000 telephone interview. The above amendments to claims 1 and 9 and the following remarks are in accordance with the material discussed and agreed to in the telephone interview.

REMARKS

I. Preliminary Remarks

Applicant has carefully considered the detailed Office Action, as well as points made by the Examiner during the telephone interview, and sets forth detailed responses herein. Also, claims 1 and 9 have been amended to more particularly point out and distinctly claim certain aspects of Applicant's invention. Claim 1 has been amended to clarify its antecedent basis for certain elements. Claim 9 has been re-written to be in independent form according to claim 1, and to clarify the functionality of its limitation regarding the size of the display indicating frame. The functionality was added in this amendment per request of the Examiner during the telephone interview, for clarification purposes only, and comes directly from previously-examined claim 7. All of the language of the amended claims 1 and 9 has previously been before the Examiner; no new matter has been added. Claims 1-9 are now pending. Reconsideration and allowance of all

S/N 09/040,539

of the claims in view of the above amendments and the following remarks are respectfully requested.

Applicant notes that the amendments are not intended to change the scope of the claimed invention. Rather such amendments are being made solely in response to the Examiner's rejection under 35 U.S.C. §103 and remarks during the telephone interview. Accordingly, it is respectfully submitted that such amendments do not raise new issues and should be entered in accordance with 37 C.F.R. 1.116(a) and MPEP 714.12 and 714.13.

II. Rejection Under 35 U.S.C. §112

A. First paragraph:

Paragraph 2 of Detailed Action

The Office Action rejected claims 1-9 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not enabled by the specification. Specifically, the Office Action asserts that the applicant fails to provide enabling disclosure of the claim limitations found in claim 1, lines 11-12 and claim 1, line 15, as well as similar recitations in claims 2-7.

Claim 1, lines 11-12

Regarding claim 1, lines 11-12, the Office Action asserts a failure of the specification to enable the claimed limitation "said first sub-screen window *causing* said display indicating frame to be moved within said first sub-screen while said pointing device is in dragging state." Applicant maintains that this limitation is properly enabled by the specification. For example, page 4, lines 6-8 of the application, which introduces this function, recite:

"the first sub-screen window **causing** the display indicating frame to be moved within the first sub-screen while the pointing device is in dragging state."

This function is explained and enabled in the specification on page 18, lines 4-6, for example, which recite:

"The sub-screen image window 201 **provides movement and re-drawing** of the view frame 60 according to dragging and dropping of the mouse and the movement of the mouse."

Those skilled in the art will understand the functionality of a window and its inherent ability to provide movement and re-drawing of its member objects, in this case the view frame, based on its receipt of messages from a mouse or other computer peripheral device. The specification

S/N 09/040,539

provides these details, nonetheless, at page 18, line 21 through page 19, line 10. The enabling description of these pages states:

"when the sub-screen image window 201 of the sub-screen 51 of the page currently displayed on the main screen 50 detects that the view frame 60 (inverted area) has been dragged by the mouse (S1), acquisition of WM_MOUSEMOVE message (signal) of the mouse 7, that is so called mouse capture is started (S2). When the sub-screen image window 201 detects that the view frame 60 has moved within the sub-screen 51 (S3) based on the output of the mouse (WM_MOUSEMOVE), it causes the view frame 60 on the sub-screen 51 to move corresponding to the movement of the mouse and notifies the movement to the main screen image window 220 (S4)."

Those skilled in the art of Windows programming understand the manner in which a window, in this case the sub-screen image window, utilizes messages, in this case WM_MOUSEMOVE, to move and re-draw member objects, in this case the view frame. The utilization of messages to provide movement and re-drawing is one method by which a window causes an object to move corresponding to the movement of a mouse, and is well known in the art. The relevant description in the specification is sufficient to enable one skilled in the art to program a sub-screen window containing a display indicating frame subject to the limitation "said first sub-screen window causing said display indicating frame to be moved within said first sub-screen while said pointing device is in dragging state."

Claim 1, line 15

Regarding claim 1, line 15, the Office Action asserts a failure of the specification to enable the claimed limitation "moving ... said *display area* within said main screen." Applicant maintains that this limitation is properly enabled by the specification. This function is described, for example, in the specification on page 19, lines 13-18, which recite:

"The main screen image window 220 provides movement of display screen position of the main screen 50 corresponding to the movement of the mouse which is notified from the sub-screen image window 201 (S6). Thus, by dragging the view frame 60 in the central sub-screen 51 within the same page, the display area within the main screen also moves in real time."

Again, those skilled in the art will recognize the ability of a window to receive mouse movement and position information and adjust, or move, its display position, or display area, accordingly. Yet, the specification proceeds to include additional detail, for example from page 20, line 20 through page 21, line 2, which explain:

S/N 09/040,539

"When the main screen image window receives notification of the display position information, it moves the display screen position of the main screen 50 corresponding to the notified display position information (S14)."

Those skilled in the art of Windows programming will understand how to program a window, which has the inherent capability to receive and utilize notification of display position information, and move the **display screen position**, or **display area**, according to that information. The Office Action asserts that a window may scroll or move displayed "data" in contrast to a "display area." Applicant appreciates Examiner's remarks, and has amended claim 1 to clarify antecedent basis for the "display area" accordingly. In view of the amendments, Applicant respectfully refers Examiner to stated antecedent basis for the claimed **"display area,"** which is **"a first area of image data"** displayed in a first "sub-screen." Therefore, the **"display area"** moved by the main window is, in fact, the **"image data."** Applicant maintains, therefore, that the specification is sufficiently enabling for one skilled in the art to program a main window containing a **display area**, which in this case is properly defined as a sub-screen **"area of image data,"** to receive position notification information and utilize that information as stated in the claimed limitation "moving ... said **display area** within said main screen" according to the position information.

In view of the above amendments and remarks, it is respectfully submitted that claims 1-7 are properly enabled and are, therefore, in condition for allowance under 35 U.S.C. §112, first paragraph.

Paragraph 3 of Detailed Action

The Office Action rejected claims 8-9 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not enabled by the specification.

Claim 8

Regarding claim 8, the Office Action asserts a failure of the specification to provide a detailed description of the "movement of the indicating frame in all directions and not limited to lateral movement in a plane." Applicant maintains that this limitation is properly described by the specification. For example, page 5, lines 9-11 of the application, recite:

"the pointing device has dropped the display indicating frame at an arbitrary place on the second screen to which the pointing device moved."

S/N 09/040,539

The language of the specification clearly emphasizes and distinguishes that the directional movement of the indicating frame is **arbitrary**, and not bound by lateral, or other, motion constraints. This specificity of **arbitrary** motion is sufficient support for the claimed limitation of the movement not being limited to lateral directions.

Claim 9

Regarding claim 9, the Office Action asserts a failure of the specification to provide a detailed description of the "size of the indicating frame." Specifically, the Office Action states that the illustrative description of "indicating frame 80" in figure 2 describes the indicating frame as being "wider than the width of page 12." Applicant agrees with Examiner that the indicating frame 60 (not 80) may indeed be wider than the width of **page 12** as shown in figure 2. Applicant respectfully points out, however, that the claimed limitation of claim 9 is not related to the width of **page 12**, but is instead related to the width of said first **sub-screen**:

"...display indicating frame has a width and a height, said width being less than a width of said first **sub-screen**...."

In accordance with the limitation of the claim language, which is that the display indicating frame has a width that must be "less than a width of said first **sub-screen**", figure 2 does indeed illustrate display indicating frame 60 having a width **less than the width of sub-screen 51**, even if wider than the width of page 12. Therefore, Applicant maintains that the limitation of claim 9 is properly described by the specification.

Claim 9 has also been amended, both to place it in independent form and to add a description of functionality per the Examiner's request during the telephone interview with the Examiner. It is anticipated, according to the telephone interview, that the amendment shall place claim 9 in condition for allowance. The language descriptive of functionality added to claim 9 in this amendment, "the sub-screen displays a reduced image of a page which is currently displayed on said main screen with the area displayed in said main screen indicated by a display indicating frame," is also recited in claim 7, and has previously been before the Examiner during prosecution of the application. Therefore, no new matter has been added in this amendment, which clarifies the functionality of the claimed limitation.

S/N 09/040,539

In view of the above remarks, it is respectfully submitted that claims 8 and 9 are properly enabled by the specification and are, therefore, in condition for allowance under 35 U.S.C. §112, first paragraph.

III. Summary of Rejection(s) Under 35 U.S.C. §102(e)

Paragraph 4 of Detailed Action

The Office Action rejected claims 1-9 under 35 U.S.C. §102(e) as being anticipated by US patent #5,945,998 (Eick). Briefly, regarding claims 1, 4 and 6, the Office Action states that *Eick* fails to specifically teach that the rectangles 205 are windows, but that they can be considered the equivalent of "windows." The Office Action further states, regarding claims 2-3, 5, and 7, that *Eick* fails to teach that the rectangle 205 displays a reduced image of a page, but that *Eick's* suggestion relating to utilization of a spreadsheet would have rendered the display of a reduced image of a page obvious. Additionally, the Office Action states, regarding claim 8, that the indicating frame is not limited to lateral movement from col. 205(1) to col. 205 in the *Eick* patent, rendering the limitation of claim 8 obvious. These rejections are respectfully traversed.

Claims 1, 4 and 6

The Office Action asserts that the rectangle 205 of *Eick* can be considered the equivalent of a window. However, there is a distinct difference drawn between rectangles 205 and windows in the *Eick* reference. For example, column 18, lines 18-19 of *Eick* teach "**Rectangle 504 and code window 505 together make up a code viewer.**" *Eick*, therefore, draws clear distinction between two separate kinds of objects: a window and a rectangle. Also, column 19, lines 7-9 teach that "The developer then uses the mouse to size the window and rectangle 504 is sized proportionally to the window size." The *Eick* teachings require **two distinct functional objects: a window and a rectangle**. There is no teaching or suggestion in *Eick* for the function of each of these objects to be combined in a single, different object. Therefore, the rectangle 205 of *Eick* can **not** be considered the equivalent of a the claimed "sub-screen window" of claim 1 of the present invention.

Furthermore, page 18 line 4 through page 21 line 10 of the specification of the present invention teach significant detail regarding the functionality of the claimed window to provide movement, resizing, and data display. The windows of the present invention clearly receive data

S/N 09/040,539

input, process the data input, and perform a variety of functions based on the processing of the data input. The **windows** of the present invention are specialized objects, well known in the art, clearly supported in the specification, and have **different functionality** than the **rectangles** of *Eick*. Therefore, the **windows** of the present invention can **not** be considered the equivalent of the **rectangles** of *Eick*.

Claims 4 and 6 do not include a window. However, each of claims 1, 4 and 6 recite the display indicating frame to be moved **"while said pointing device is in dragging state."** This limitation distinguishes over the *Eick* reference, which fails to teach, or suggest, the claimed limitation of moving the display indicating frame and the display area **"within said main screen in correspondence to the movement of a pointing device** which causes said display indicating frame to be moved within said first sub-screen **while said pointing device is in dragging state"** of claims 1, 4 and 6.

Claims 2-3, 5 and 7

The Office Action asserts that in view of *Eick's* teachings, use of the rectangle 205 to display a reduced image of a page would have been obvious. However, *Eick* teaches that in utilizing a column 205 as a "natural representation for the files," each line representation 207 would represent a single cell of a spreadsheet. This, according to *Eick*, would enable viewers to examine individual cells or groups of cells. Furthermore, this implementation, as taught by *Eick*, would utilize the column 205 to display lines 207 that were **symbolic** indicators of the type of data contained in a spreadsheet, rather than to display the **actual content**, or **reduced image**, of the spreadsheet. *Eick* states in column 21, lines 12-16, that "Colors of line representations 207 could be used to indicate information such as **cell type**, the **kind of information** contained in the cell, **dependencies** among the cells, or the **time** the cell was last modified." There is no teaching or suggestion in *Eick* for using the line representations 207 to display the **actual data**, or **reduced image**, of the spreadsheet. Therefore, there is no teaching or suggestion in *Eick* for utilizing a column or rectangle 205 to display the claimed **"reduced image of a page"** of claims 2-3 and 5, or the claimed **"part of that page with enlargement"** of claim 7.

Claim 8

The Office Action asserts that in *Eick*, the indicating frame is not limited to lateral movement from col. 205(1) to col. 206 as illustrated in figure 2. However, Applicant points out

S/N 09/040,539

that dependent claim 8 of the present invention depends from claim 1 and, accordingly, that the "movement" of claim 8 is limited by claim 1 "to be moved within said first sub-screen **while said pointing device is in dragging state.**" In contrast, the *Eick* reference requires that the indicating frame be moved by attachment to a cursor. A cursor is inherently confined to lateral motion and, therefore, would be unable to move an indicating frame from col. 205(1) to col. 206. Rather, the indicating frame of *Eick* must be removed from col. 205(1) and re-instated at col. 206. The indicating frame of *Eick* is not subject to the present invention's limitation of claim 8 that the movement occur "**while said pointing device is in dragging state.**" The depending limitation of claim 8 is not applicable in the *Eick* patent, can not be interpreted in the context of the *Eick* patent, and is therefore not anticipated by the *Eick* patent.

For the above reasons, it is respectfully submitted that the rejection of all pending claims under 35 U.S.C. §102(e) based on the *Eick* reference should be withdrawn.

IV. Summary of Rejection(s) Under 35 U.S.C. §103(a)

Paragraph 5 of Detailed Action

The Office Action rejected claim 9 under 35 U.S.C. §103(a) as being unpatentable over *Eick*. Briefly, the Office Action stated that *Eick* fails to clearly teach that the width of the indicating frame 504 is less than the width of the column, but that it would have been obvious to implement the indicating frame narrower than the width of the column. Applicant respectfully disagrees.

The rectangle 504 of *Eick* is designed to encompass the entire width of the column, and there is no teaching or suggestion to enable one skilled in the art to employ a rectangle 504 of a different width, such as narrower than the width of the column, in the system of *Eick*. For example, column 19, lines 7-9 of *Eick*, require that "The developer then uses the mouse to size the window and **rectangle 504 is sized proportionally to the window size.**" Additionally, column 21, lines 58-60 of *Eick* specify that "When a cursor 110 is in scroll bar 1511, it is attached to a **rectangle 504 which covers as many line representations 207 as display 1513 contains lines 1517.**" Apparently, the rectangle 504 of *Eick* is restricted to be a necessary and specific size relative to the window size and to the number of lines contained in the display. In other words, the rectangle 504 of *Eick* is specifically prohibited from covering only a portion of the lines contained in a display. Given the certainty of the required relative size of the rectangle of *Eick*, and lacking any suggestion for implementing a rectangle of a width less than that of a

S/N 09/040,539

column or line representation 207, the *Eick* patent does not render obvious the concept of a window displaying only a portion of a page and having the claimed "width being less than a width of ... sub-screen" of claim 9.

For the above reasons, it is respectfully submitted that the rejection of all pending claims under 35 U.S.C. §103(a) based on the *Eick* reference should be withdrawn.

V. Summary of Response to Arguments

The Office Action detailed the Examiner's receipt of previous specific arguments as not persuasive. The Examiner is thanked for the clarifications detailed therein and the opportunity to further address these issues.

Paragraph 6 of Detailed Action

Regarding claims 1-7, the Office Action asserts a failure of the specification to enable the claimed limitation "moving ... said *display area* within said main screen." The examiner points out that movement within a window, or main screen, is typically of *data*, in contrast to a *display area*. Applicant agrees. Accordingly, and as previously addressed herein and consistent with Applicant's response to the portion of paragraph 2 of the Detailed Action specifically directed to claim 1, line 15, Applicant maintains that the limitation discussed in paragraph 6 of the Detailed Action is properly enabled by the specification. The function of this particular limitation is enabled in the specification, for example, from page 20, line 20 through page 21, line 2, which explain:

"When the main screen image window receives notification of the display position information, it moves the display screen position of the main screen 50 corresponding to the notified display position information (S14)."

The Office Action asserts that a window may scroll or move displayed "data" in contrast to a "display area." As previously explained herein, Applicant has amended the claim, without adding new matter and to clarify the antecedent basis for the display area. In view of the amendment, Applicant kindly refers the Examiner to antecedent basis for the claimed "*display area*," which is "a first area of image data" displayed in a first "sub-screen." Therefore, the "*display area*" moved by the main window is, in fact, the "*image data*," both as explained by the Examiner and as described by the claim language and enabled by the specification.

S/N 09/040,539

Paragraph 7 of Detailed Action

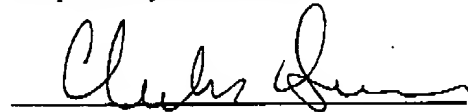
Examiner is kindly thanked for clarification of *Eick* as being prior art under 35 U.S.C. §102(e). Regarding discussion of the reference applied against the claims, Applicant kindly refers the Examiner to the discussion and explanation presented herein as the response to Paragraph 4 of Detailed Action (above). Applicant sets forth that the discussion therein will satisfy the requirement of the Office Action to explain how the claims avoid the 102(e) reference or distinguish from it.

VI Conclusion

In view of the foregoing, it is respectfully submitted that the claims in the application patentably distinguish over the cited and applied reference and are in condition for allowance. Reexamination and reconsideration of the application, as amended, are respectfully requested. Allowance of the claims at an early date is courteously solicited.

In view of the above, it is submitted that this application is now in good order for allowance, and such early action is respectfully solicited. Should matters remain which the Examiner believes could be resolved in a telephone interview, the Examiner is requested to telephone the Applicant's undersigned attorney.

Respectfully submitted,



Charles Berman
Reg. No. 29,249

Date: June 26, 2000

OPPENHEIMER WOLFF & DONNELLY LLP
2029 Century Park East
38th Floor
Los Angeles, CA 90067-3024
Phone: (310) 788-5000
FAX: (310) 788-5100